

CLAIMS

1. An aggregate treated with antifreeze comprising a salt that is at least one of calcium nitrate, sodium nitrate, or magnesium nitrate.
2. The aggregate of claim 1, wherein said antifreeze further comprises sufficient water to form an aqueous solution, and the concentration of said salt in said antifreeze ranges from 10 to 55 wt. %.
3. The aggregate of claim 2, wherein the concentration of said salt in said antifreeze ranges from 30 to 55 wt. %.
4. The aggregate of claim 3, wherein the concentration of said salt in said antifreeze ranges from 30 to 45 wt. %.
5. The aggregate of claim 4, wherein the concentration of said salt in said antifreeze ranges from 20 to 40 wt. %.
6. The aggregate of claim 1, wherein said antifreeze comprises at least two of calcium nitrate, sodium nitrate, or magnesium nitrate.
7. The aggregate of claim 6, wherein the total concentration of said salt in said antifreeze ranges from 30 to 45 wt. %.
8. The aggregate of claim 1, further comprising at least one other antifreeze agent different from said salt.
9. The aggregate of claim 8, wherein said at least one other antifreeze agent is at least one of diethylene glycol, calcium chloride, magnesium chloride, sodium chloride, magnesium acetate, or potassium acetate.
10. The aggregate of claim 1, wherein said antifreeze comprises calcium nitrate.
11. The aggregate of claim 10, wherein the concentration of calcium nitrate in said antifreeze ranges from 30 to 55 wt. %.
12. The aggregate of claim 1, wherein said antifreeze comprises sodium nitrate.

13. The aggregate of claim 12, wherein the concentration of sodium nitrate in said antifreeze ranges from 30 to 45 wt. %.
14. The aggregate of claim 1, wherein said antifreeze comprises magnesium nitrate.
15. The aggregate of claim 14, wherein the concentration of magnesium nitrate in said antifreeze ranges from 20 to 40 wt. %.
16. The aggregate of claim 1, further comprising at least one corrosion inhibitor.
17. The aggregate of claim 16, wherein said at least one corrosion inhibitor comprises at least one of sodium nitrite or calcium nitrite.
18. The aggregate of claim 17, wherein the concentration of said corrosion inhibitor is greater than zero and not greater than 5 wt. %.
19. The aggregate of claim 18, wherein the concentration of said corrosion inhibitor ranges from 0.5 to 1.5 wt. %.
20. The aggregate of claim 1, wherein said aggregate is coal.
21. A method of removing ice from a surface comprising:
 - (i) finding a surface having at least a partial coating of ice or snow; and
 - (ii) contacting said at least partial coating with a composition comprising at least one of calcium nitrate, sodium nitrate, or magnesium nitrate.
22. The method of claim 21, wherein said surface is on a roadway, on equipment, or on coal.
23. A method of preventing ice formation on a surface comprising contacting said surface with antifreeze, wherein said antifreeze comprises at least one of calcium nitrate, sodium nitrate, or magnesium nitrate.
24. The method of claim 23, wherein said surface is on a roadway, on equipment, or on coal.

25. A method of preventing freezing of aggregates comprising contacting said aggregates with an antifreeze, wherein said antifreeze comprises at least one of calcium nitrate, sodium nitrate, or magnesium nitrate.

26. The method of claim 25, wherein said aggregates are coal.

27. The method of claim 26, wherein the contact of said aggregates with said antifreeze is performed prior to transport of said aggregates in railcars, trucks, or barges.

28. The method of claim 26, wherein the contact of said aggregates with said antifreeze is performed at least in part during transport of said aggregates in railcars, trucks, or barges.

29. The method of claim 26, wherein the contact of said aggregates with said antifreeze is performed at least in part during storage of said aggregates.

30. A method of preventing freezing of coal comprising applying magnesium nitrate to the surface of said coal.